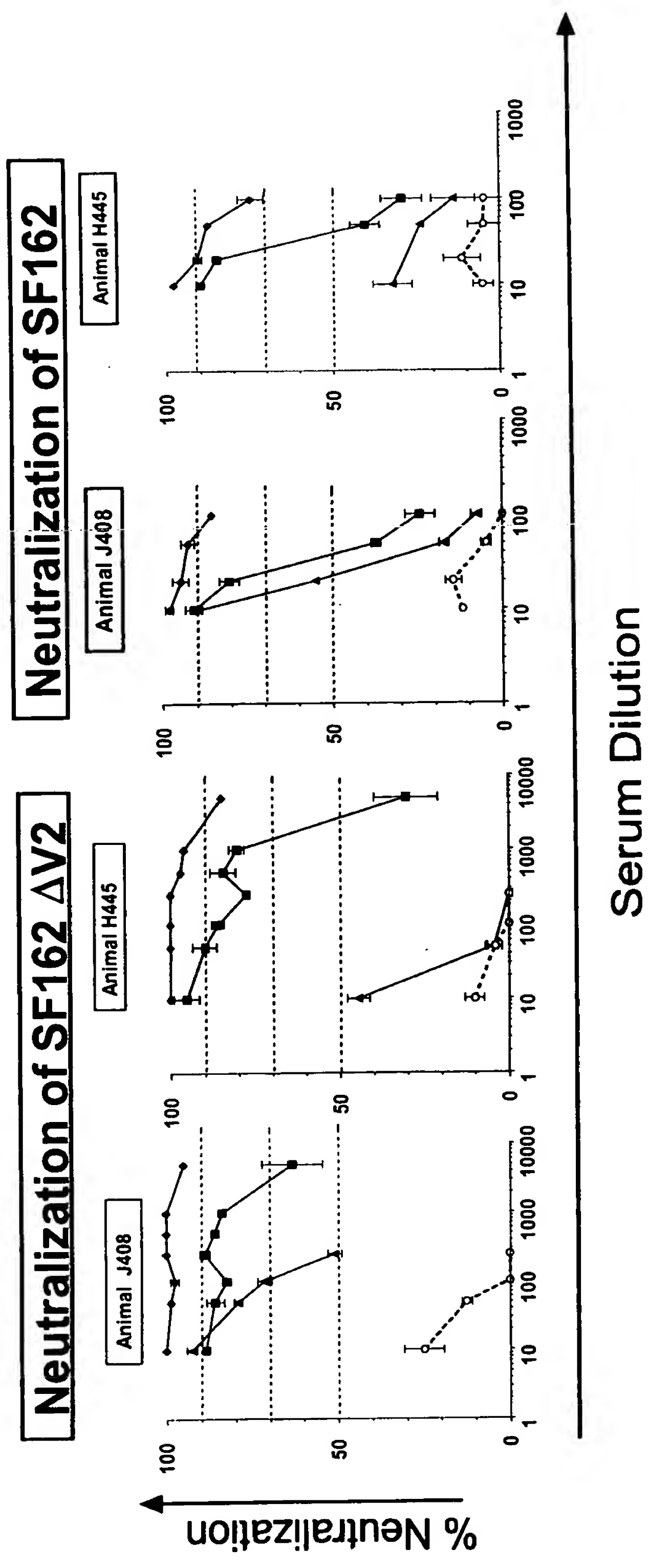
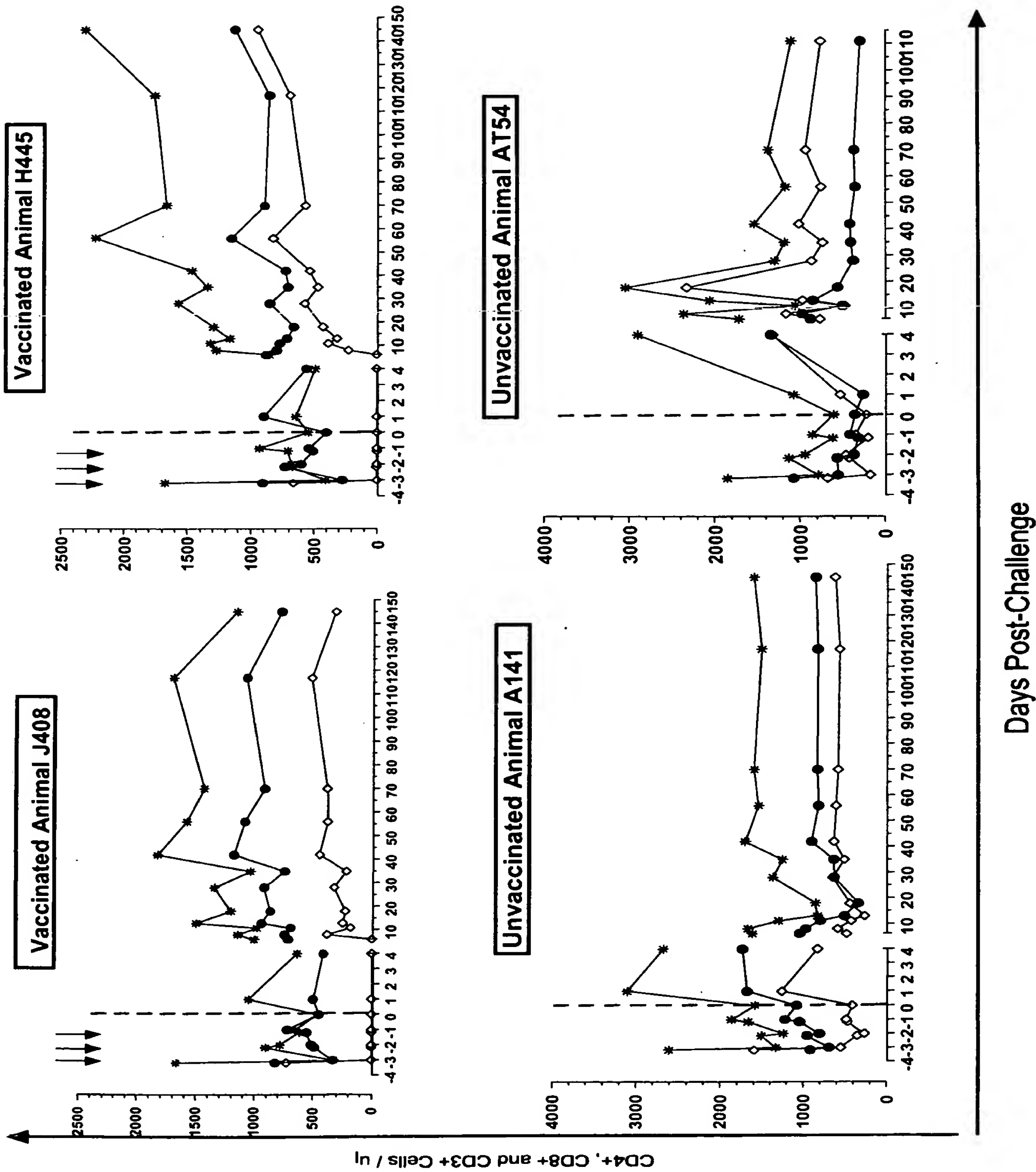


2570-1-001N FIGURE 1

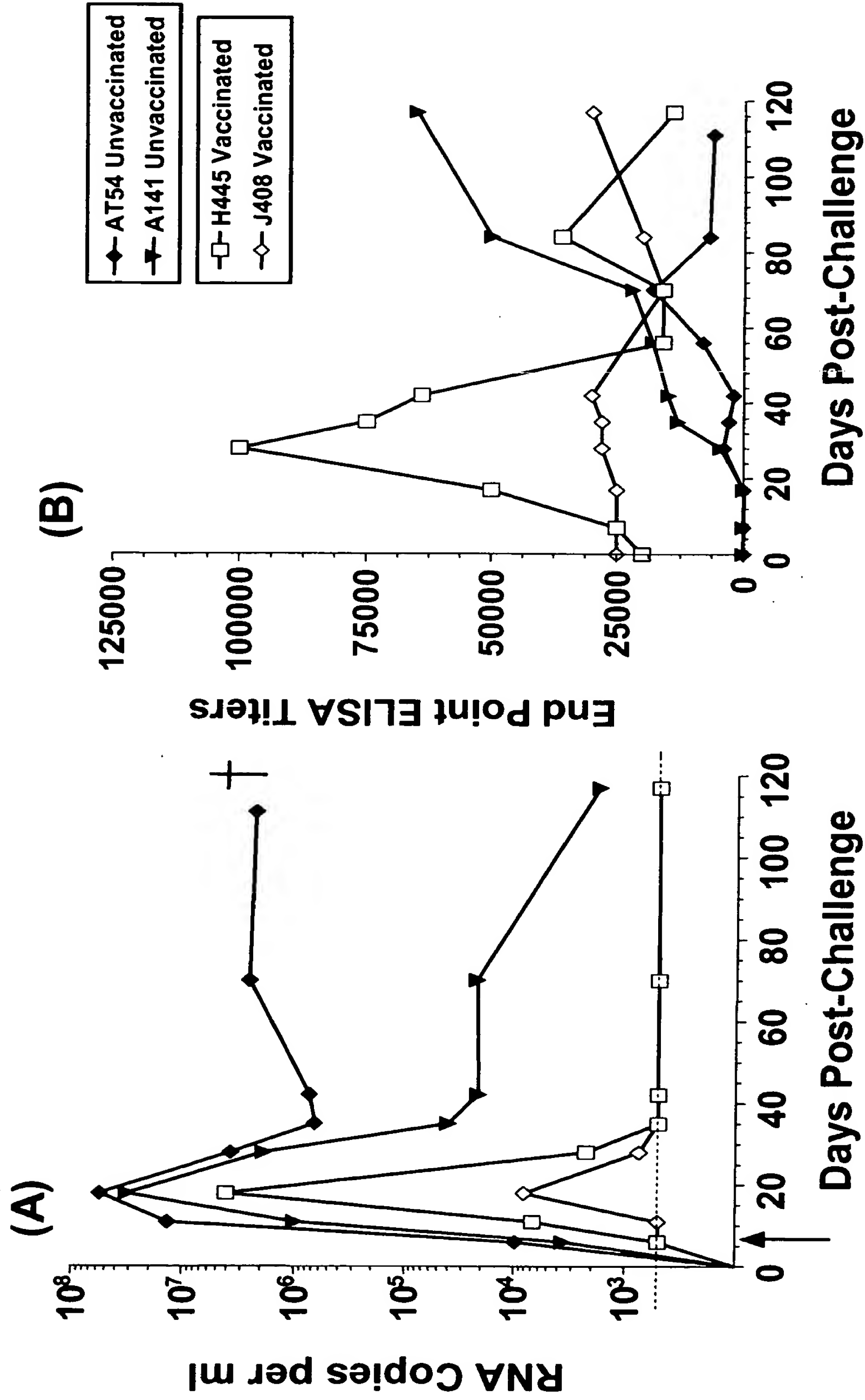


2570-1-001N FIGURE 2

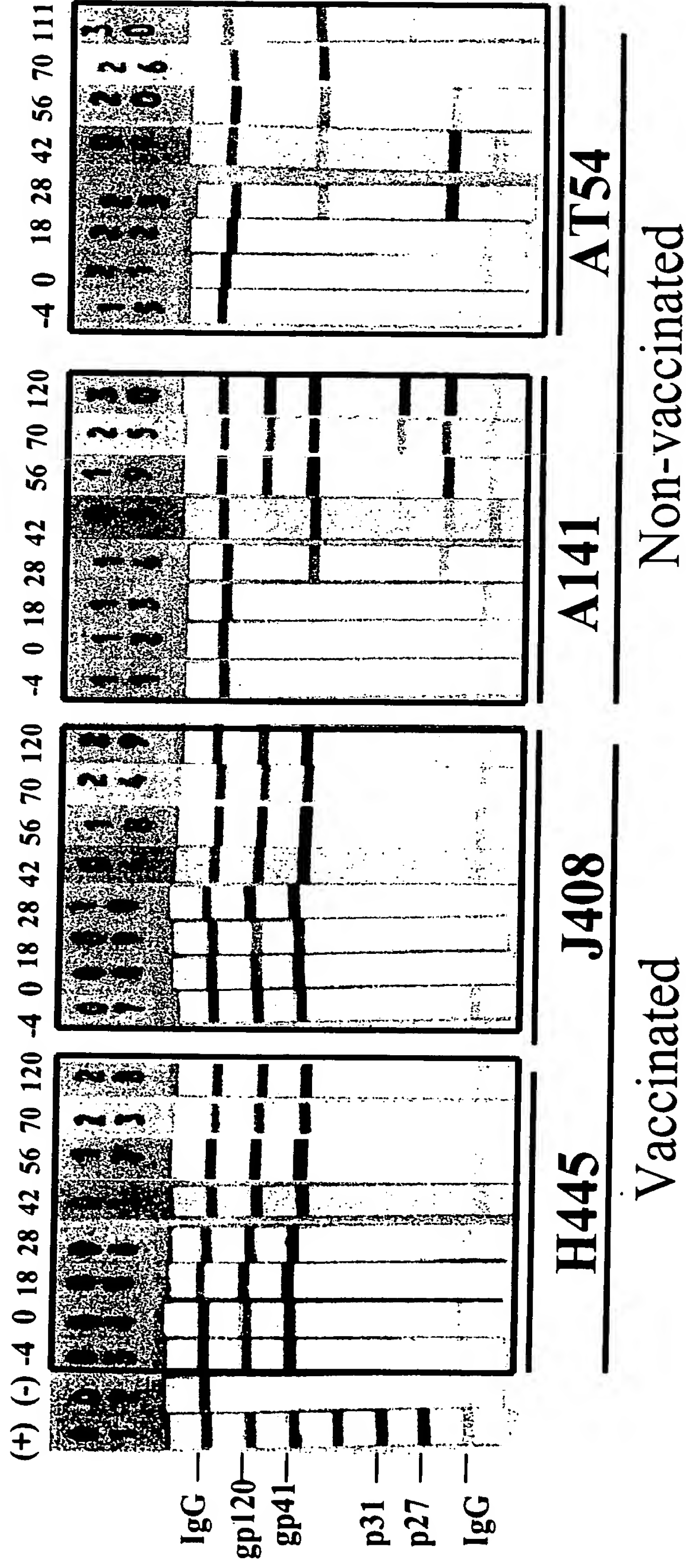
# 2570-1-001N FIGURE 3



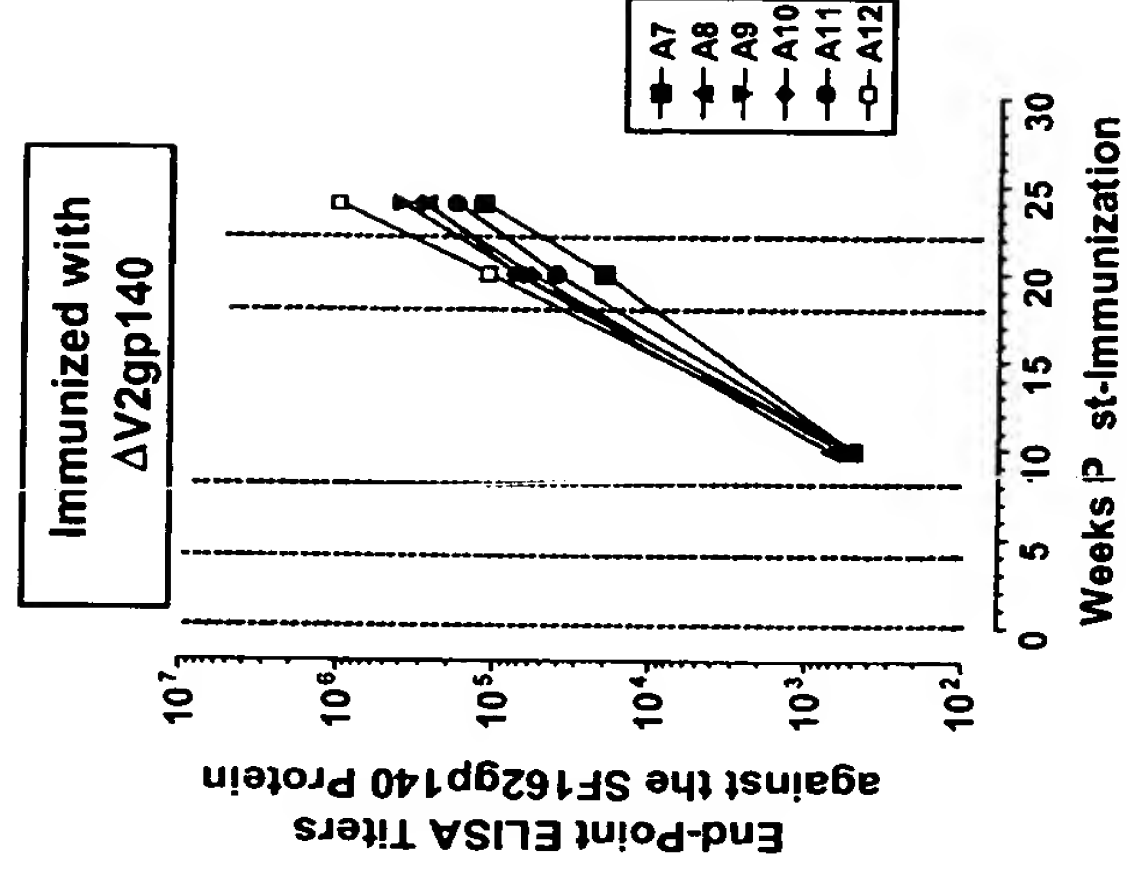
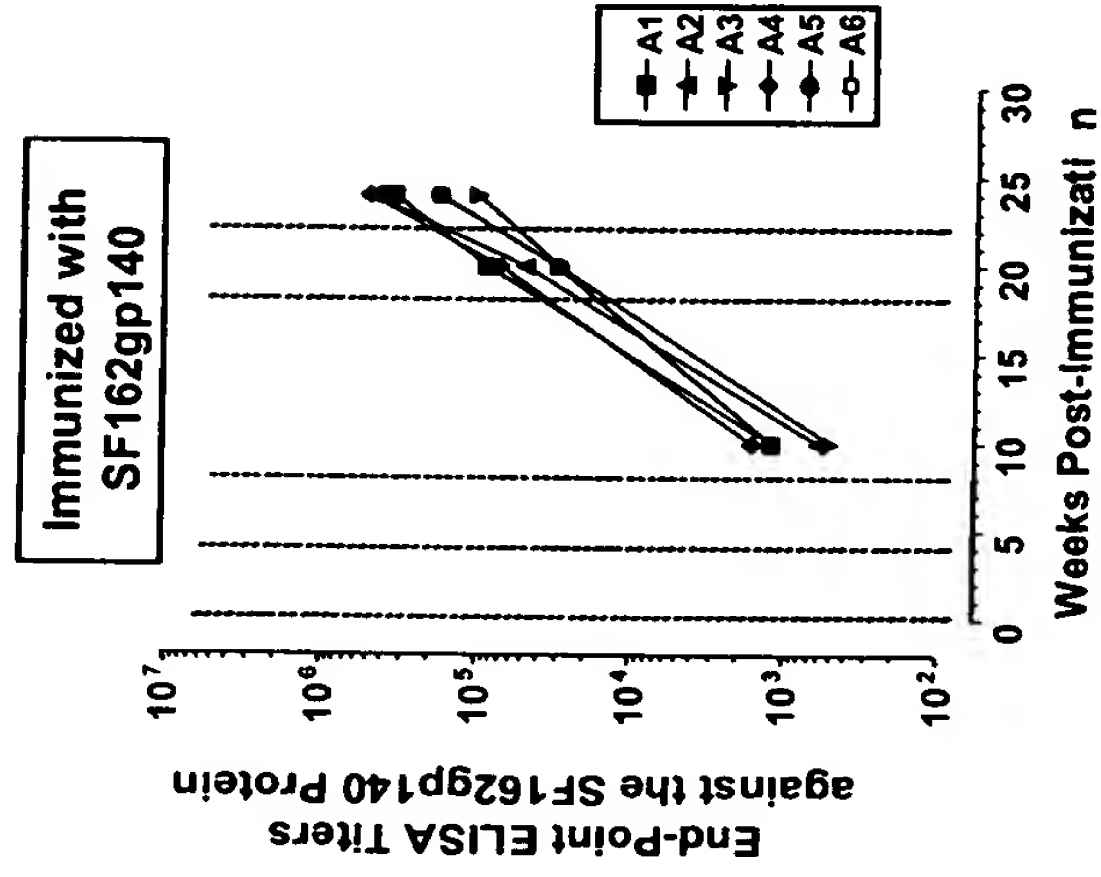
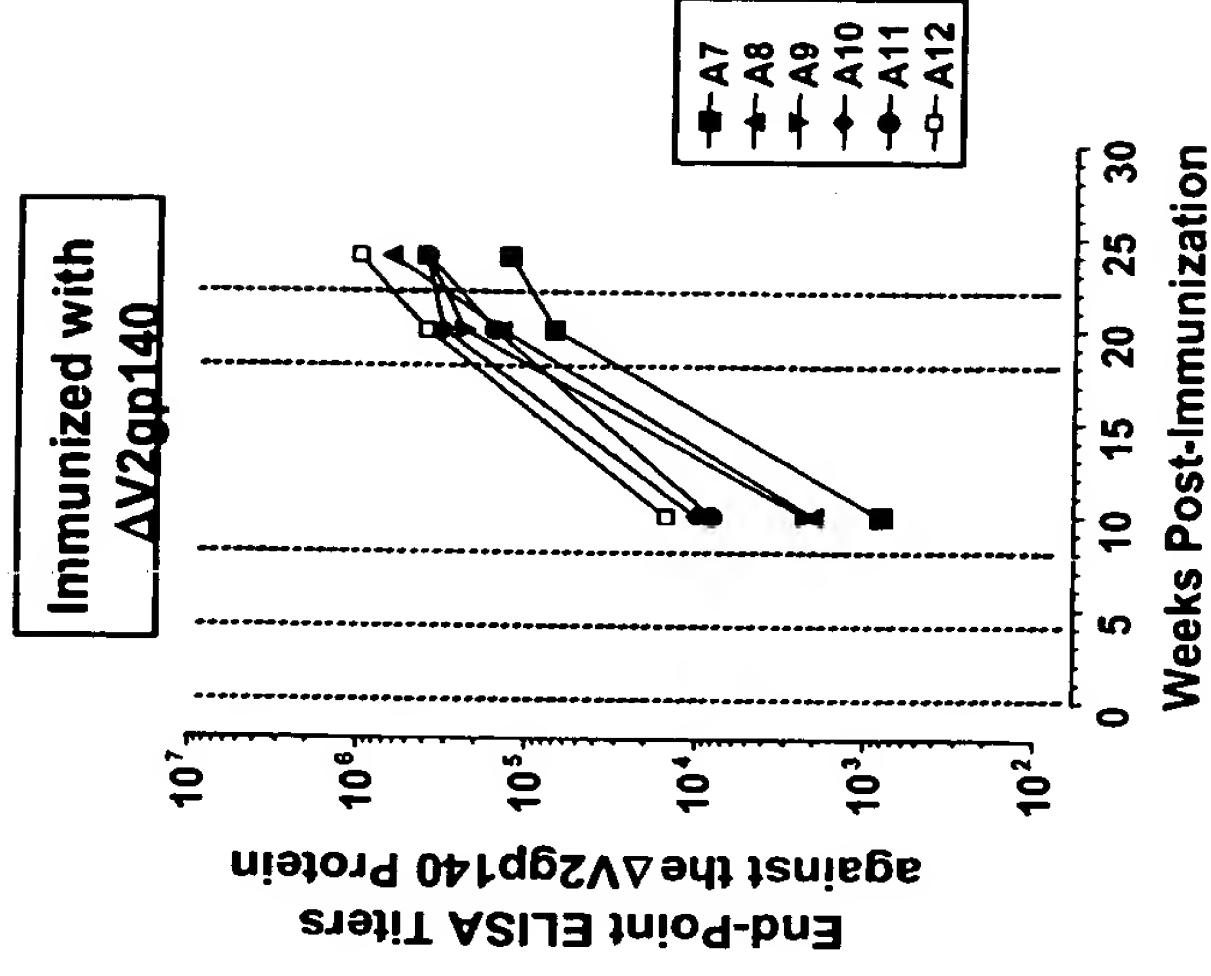
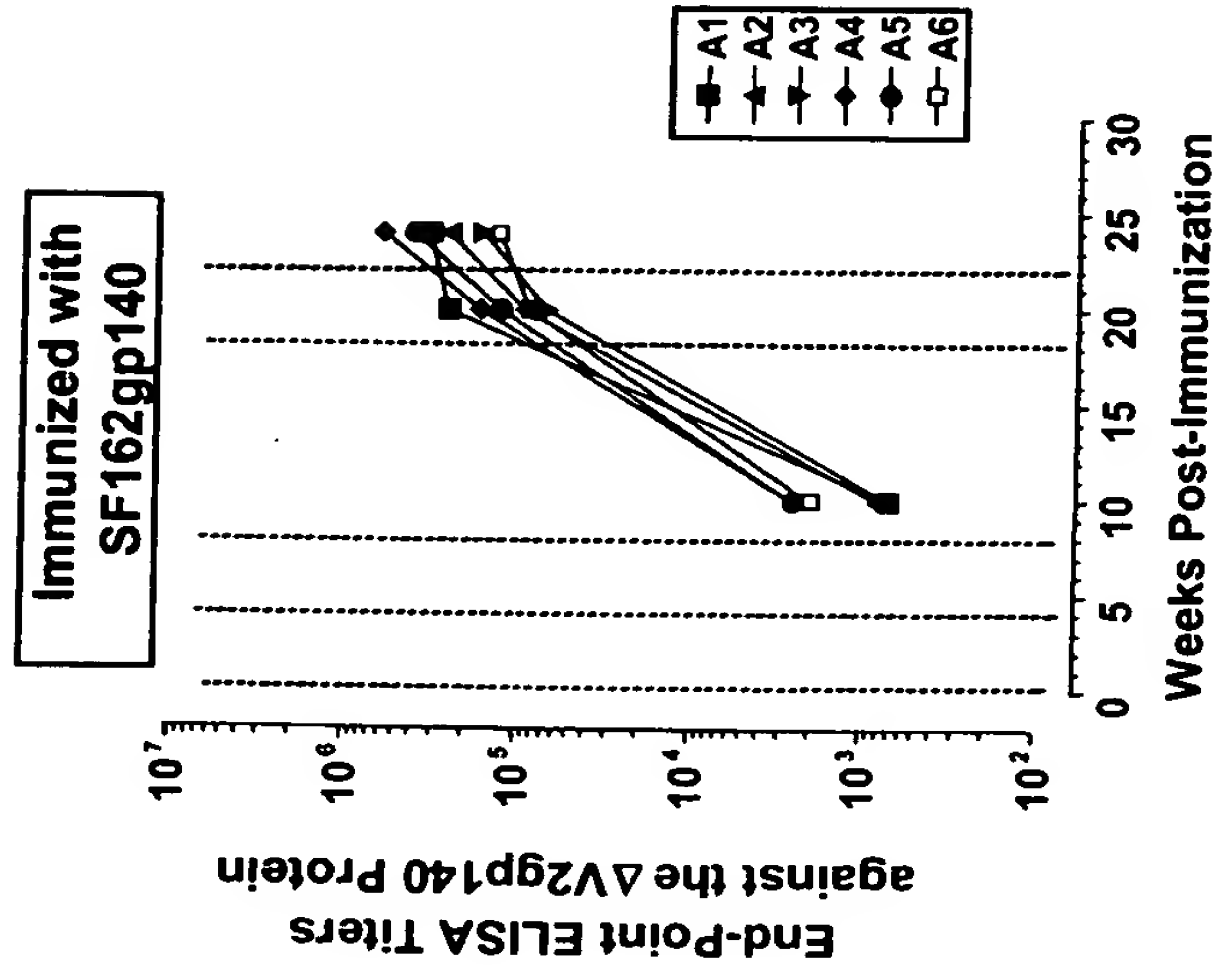
2570-1-001N FIGURE 4



# Seroconversion to SIV-gag/pol and HIV env Antigens



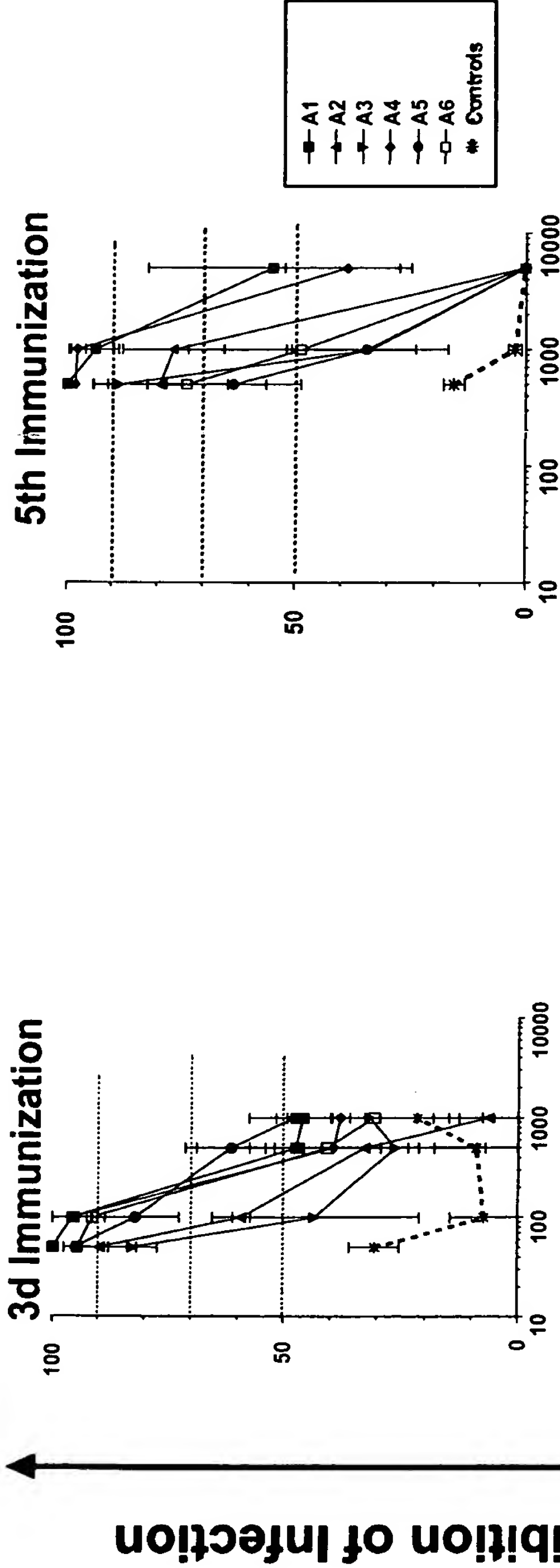
2570-1-001N FIGURE 5



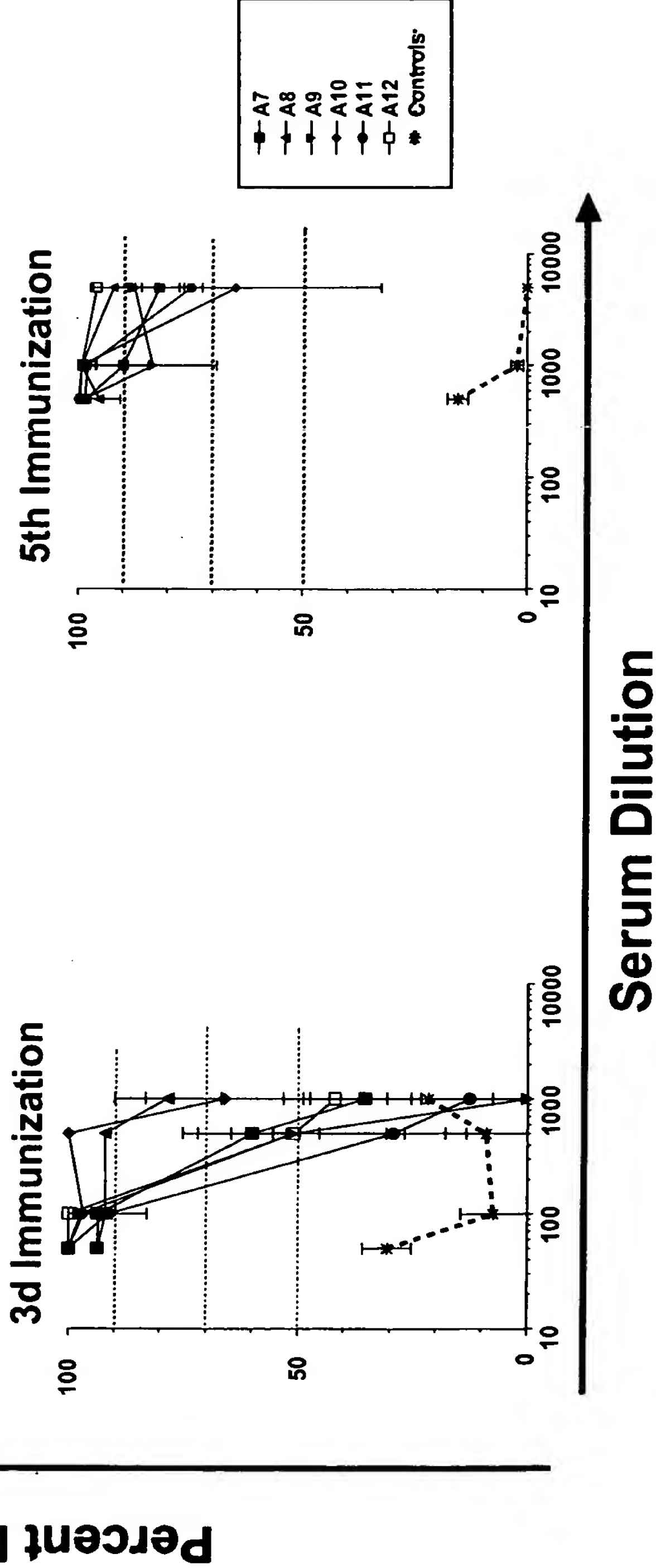
2570-1-001N FIGURE 6

2570-1-001N FIGURE 7a

Animals immunized with SF162gp140

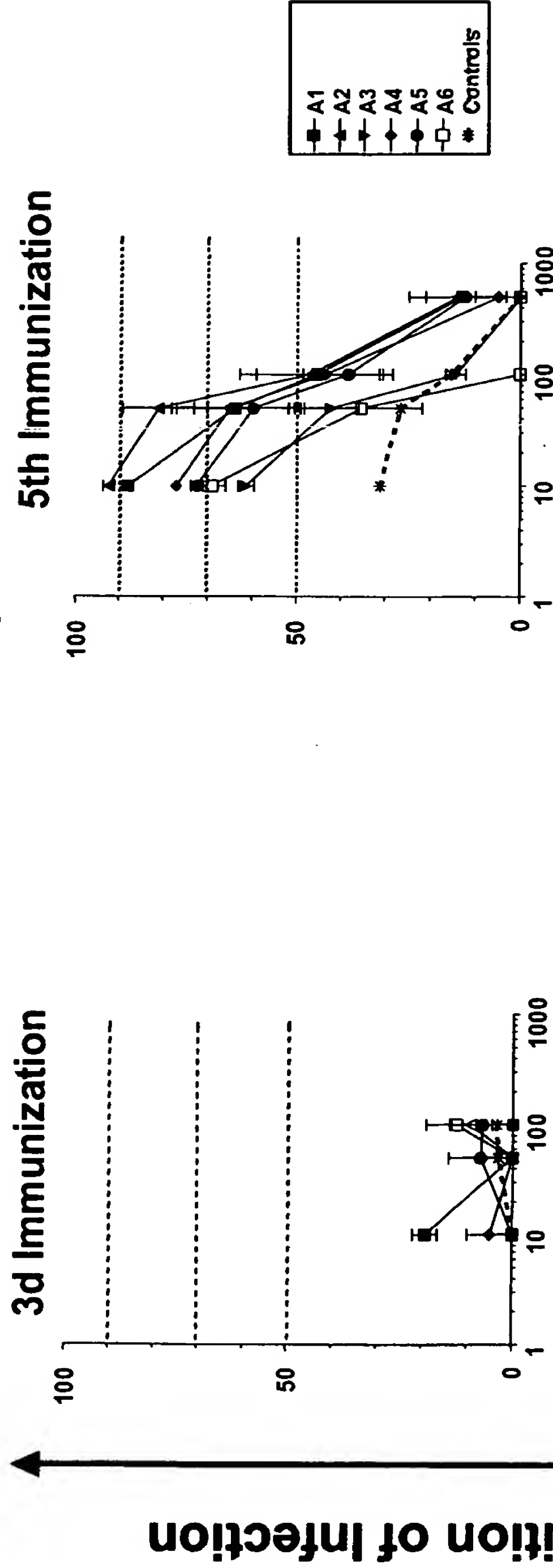


Animals immunized with ΔV2gp140

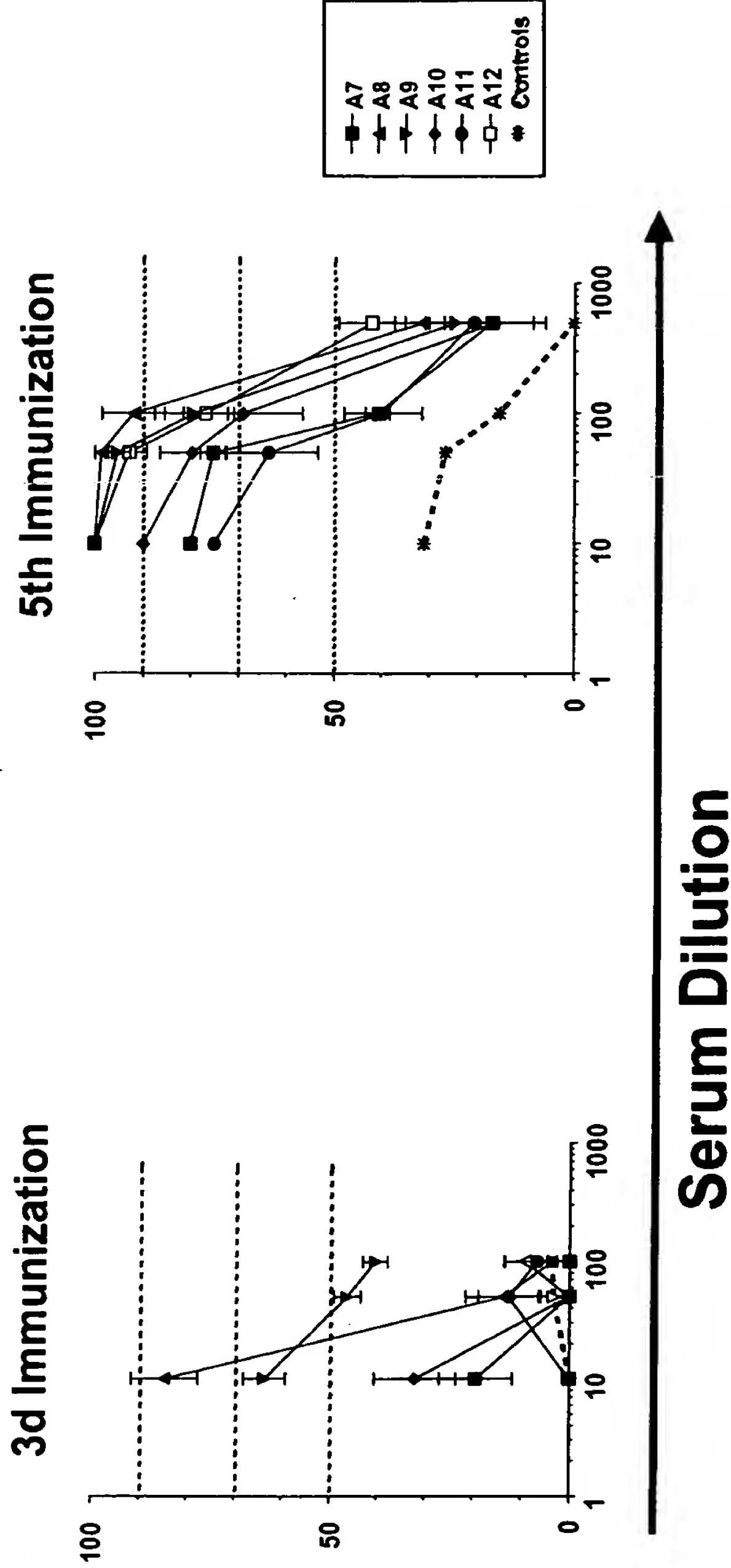


# 2570-1-001N FIGURE 7B

Animals Immunized with SF162gp140



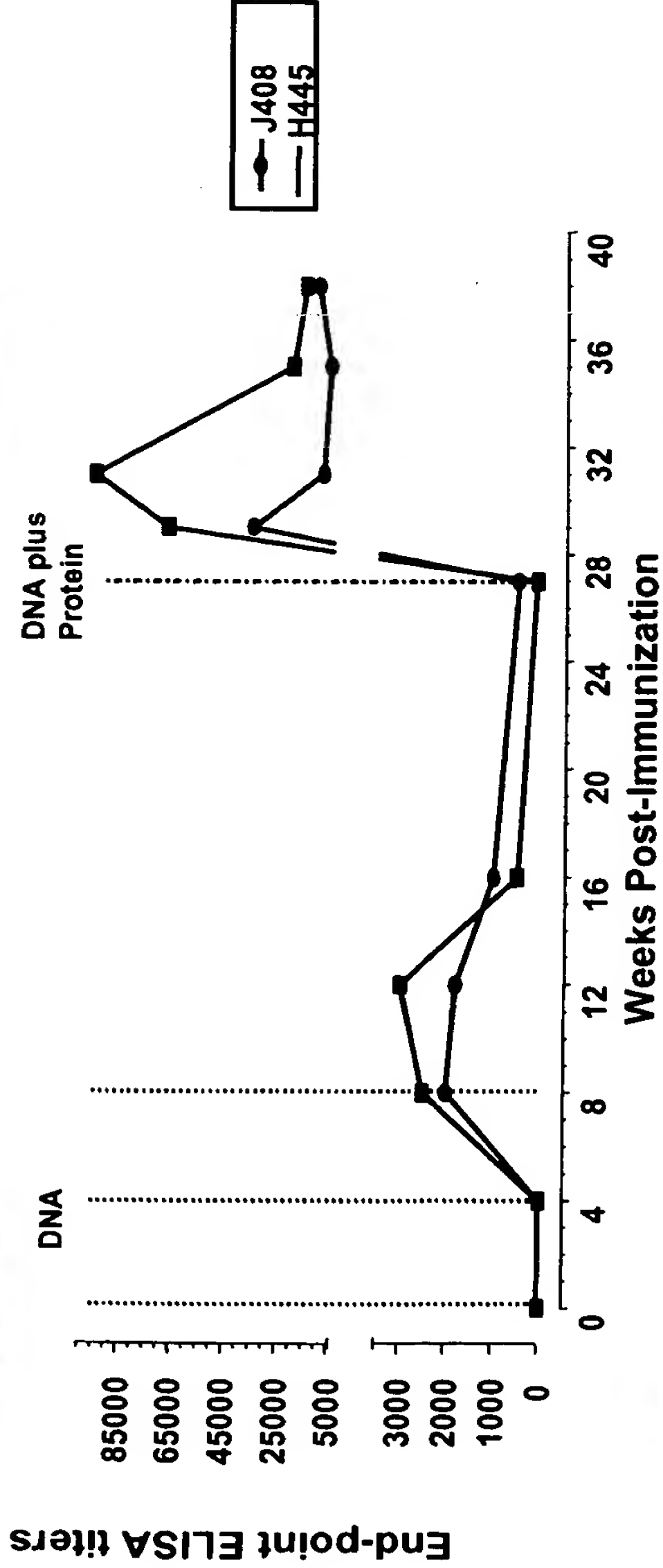
Animals immunized with  $\Delta V2gp140$



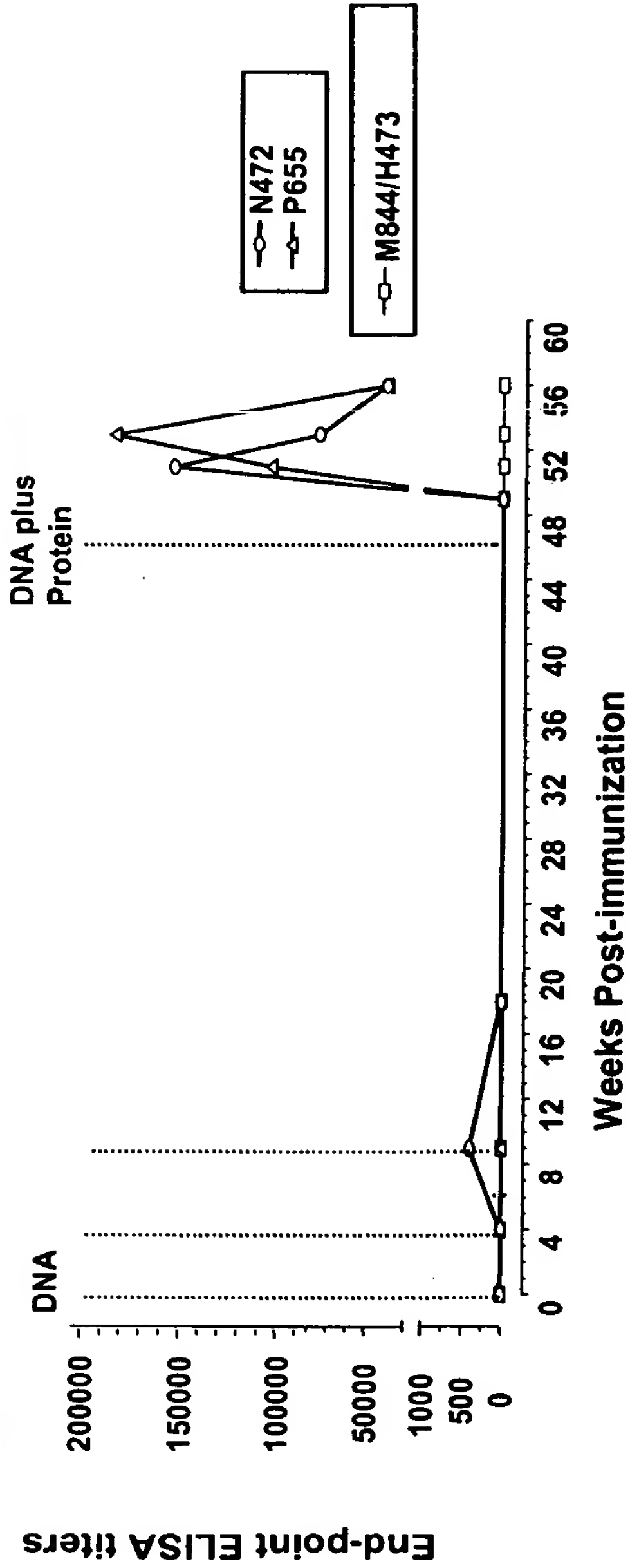


# 2570-1-001N FIGURE 8

Immunization with the modified  $\Delta$  V2gp140 immunogen

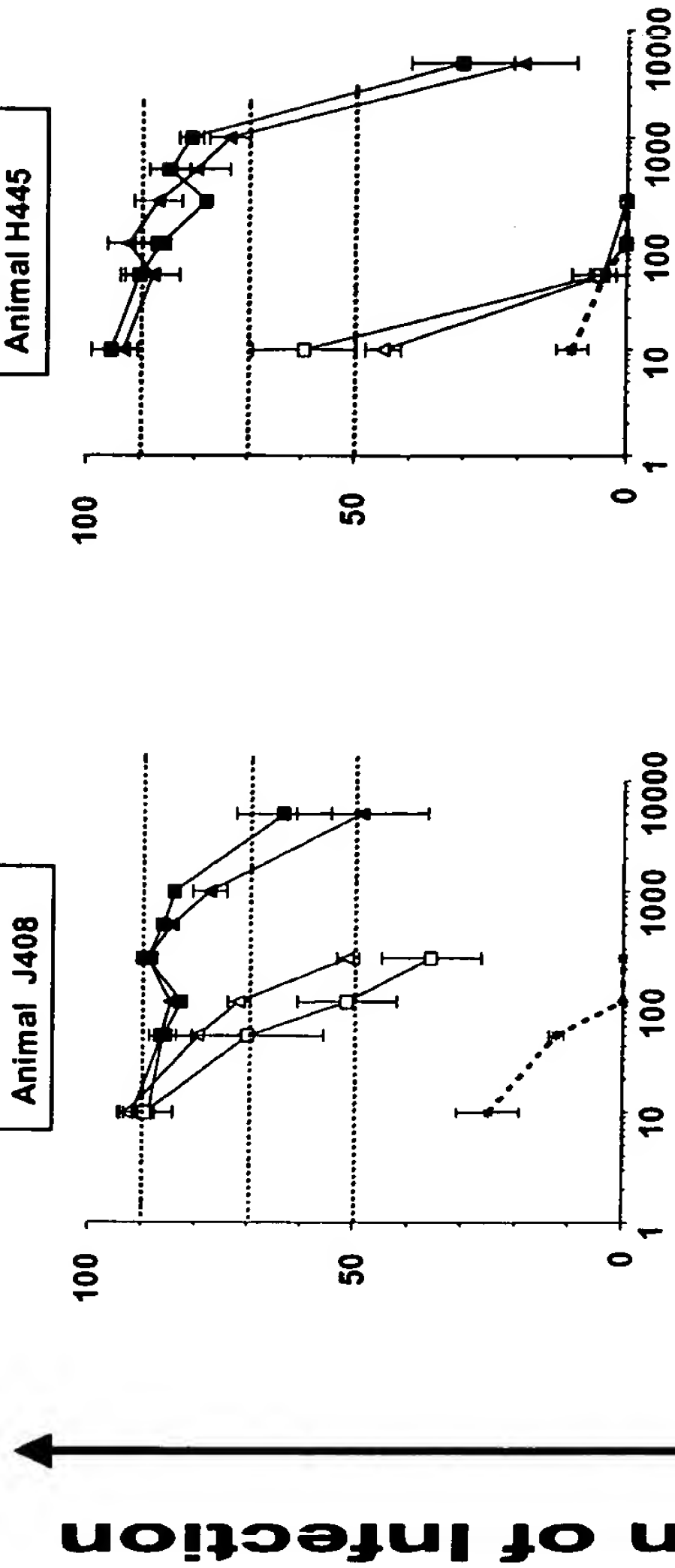


Immunization with the unmodified SF162gp140 immunogen

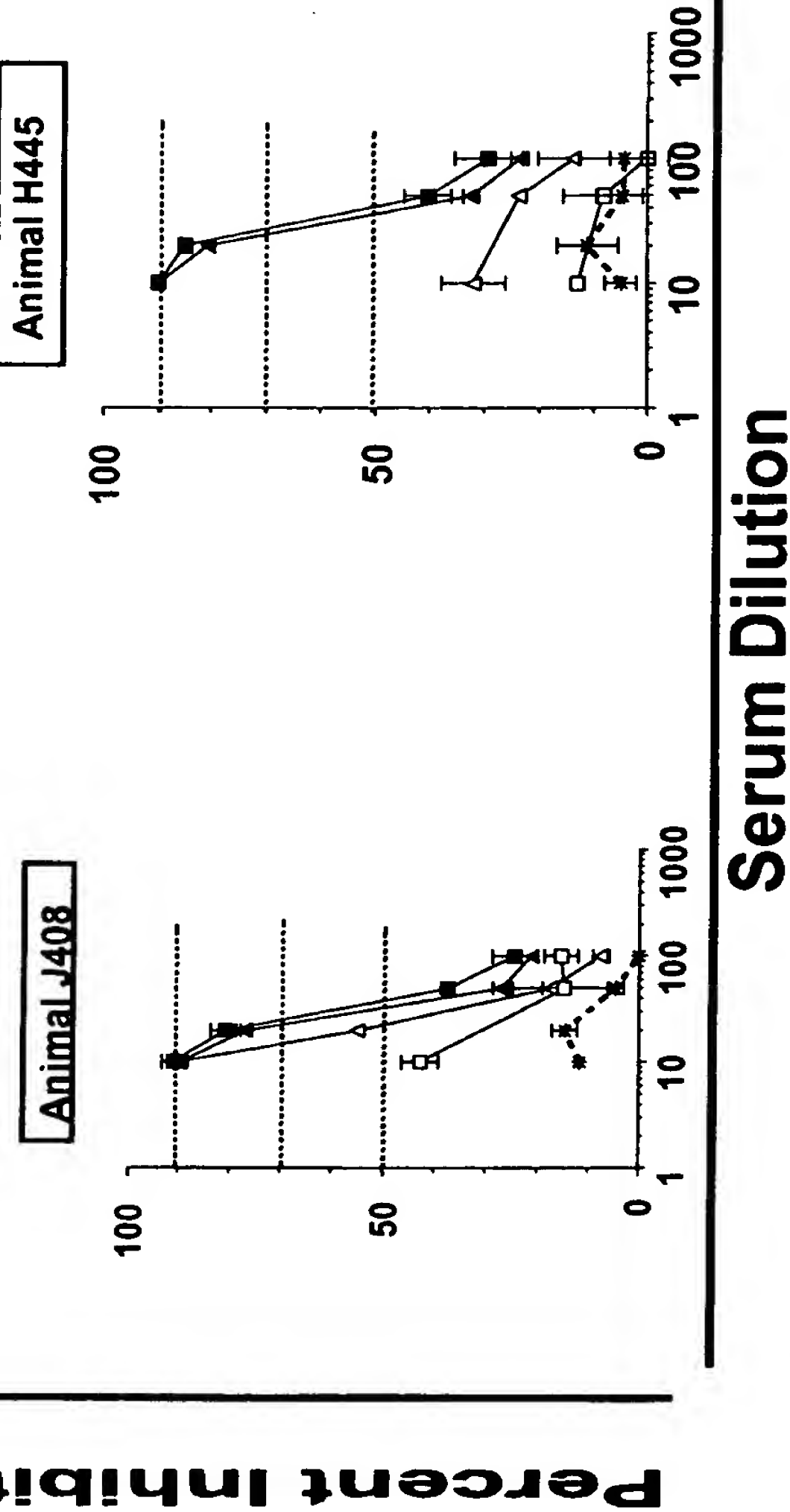


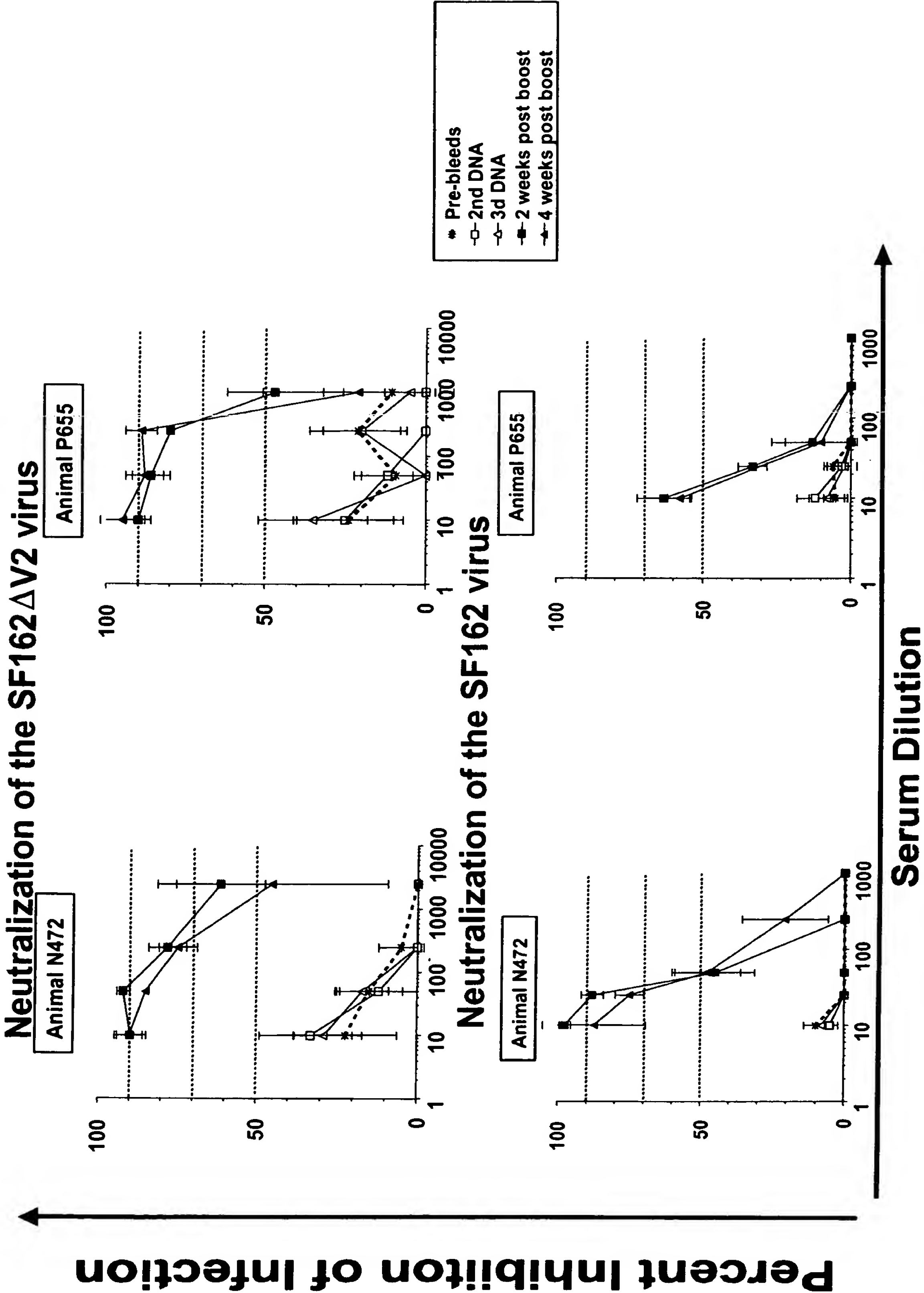
# 2570-1-001N FIGURE 9A

## Neutralization of the SF162ΔV2 virus



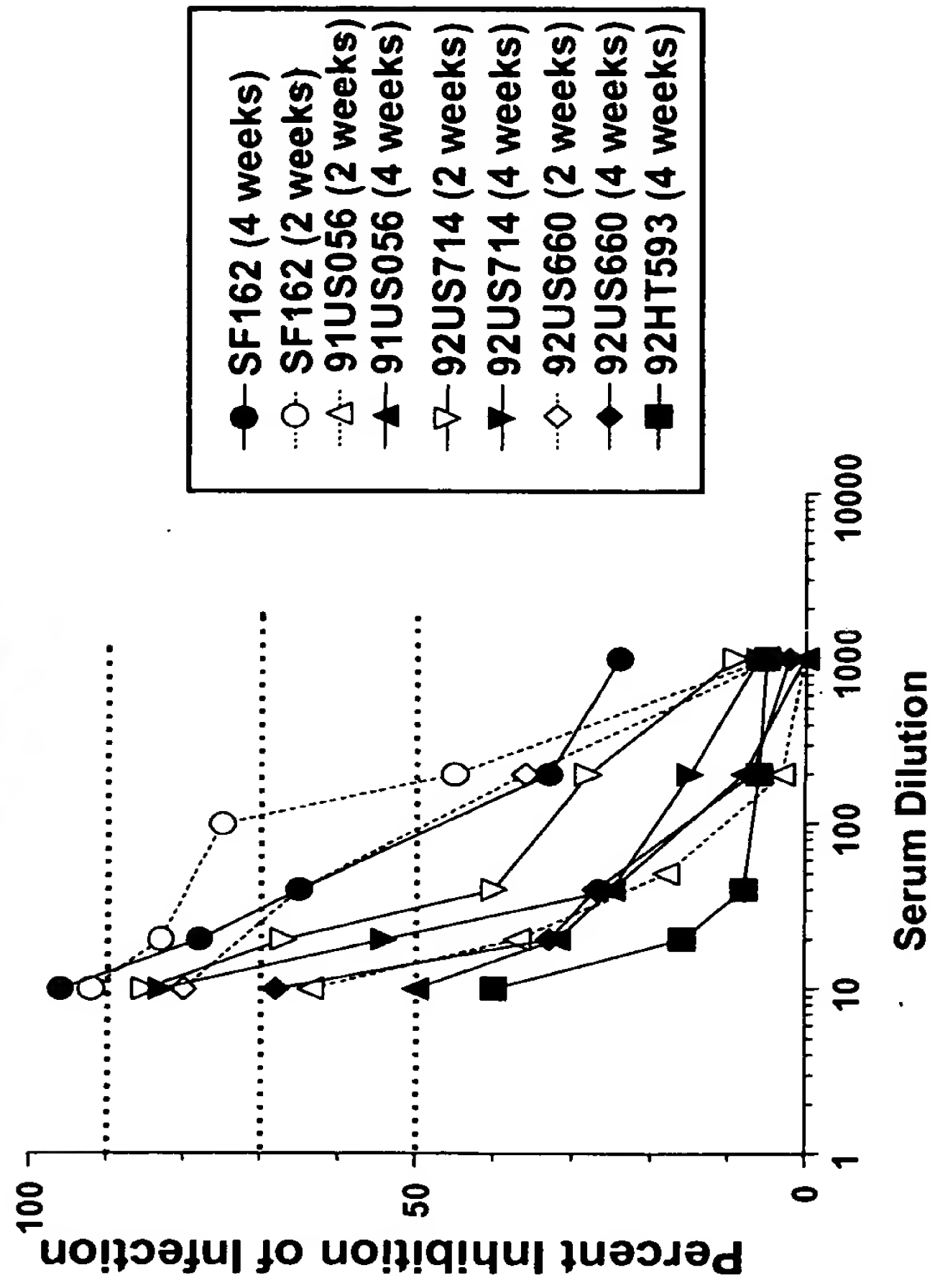
## Neutralization of the SF162 virus



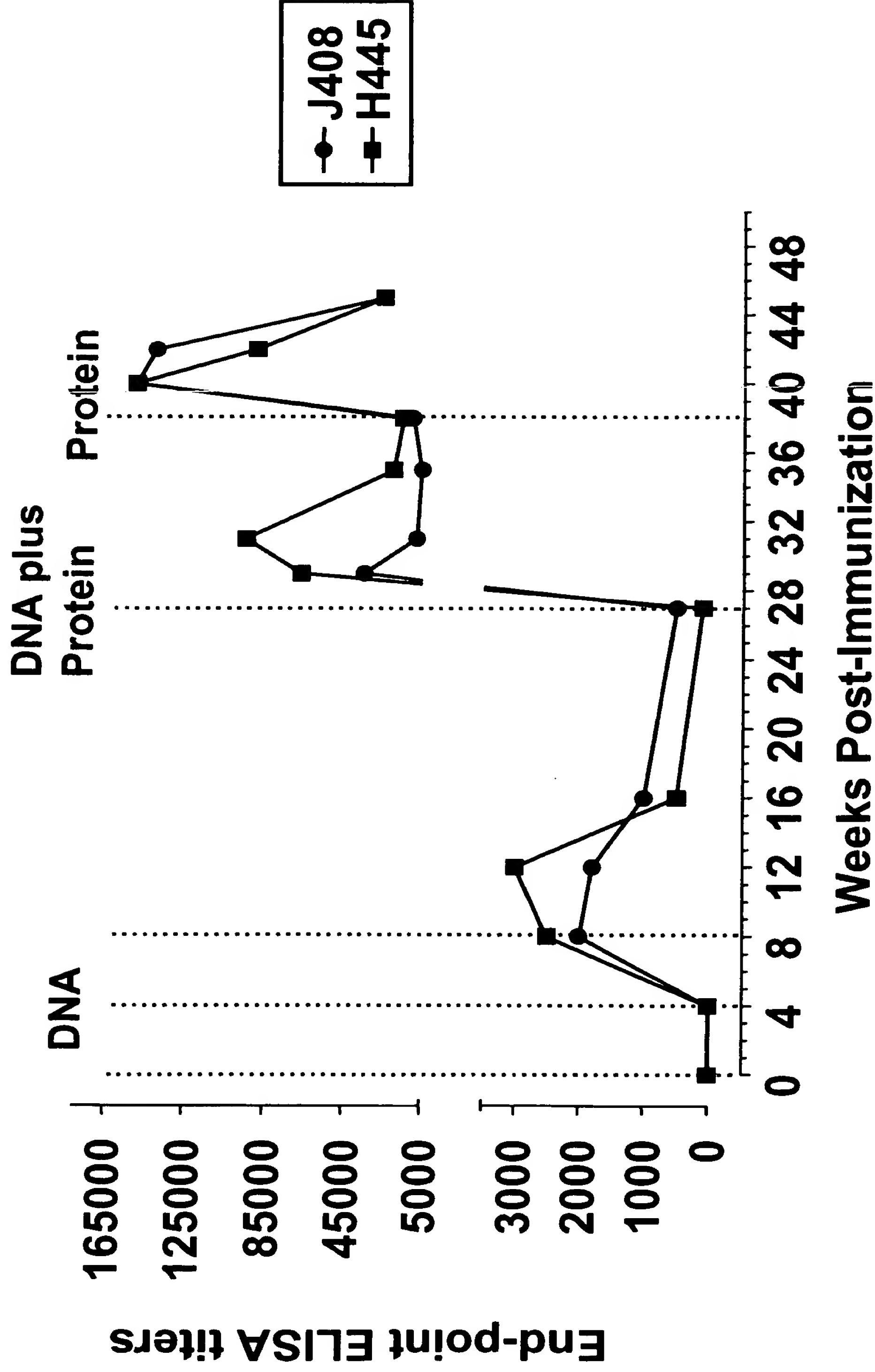


12921

**Animal J408**

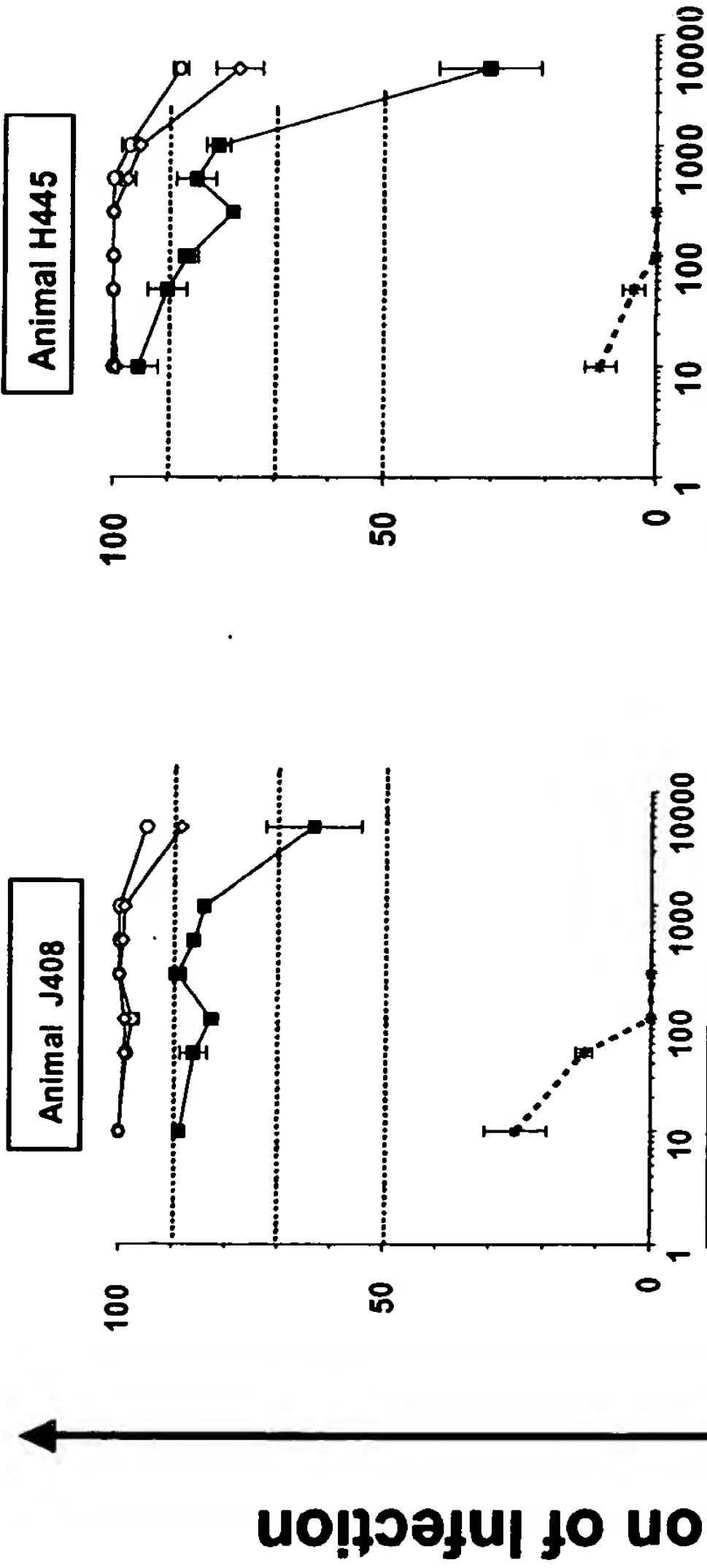


2570-1-001N FIGURE 11A

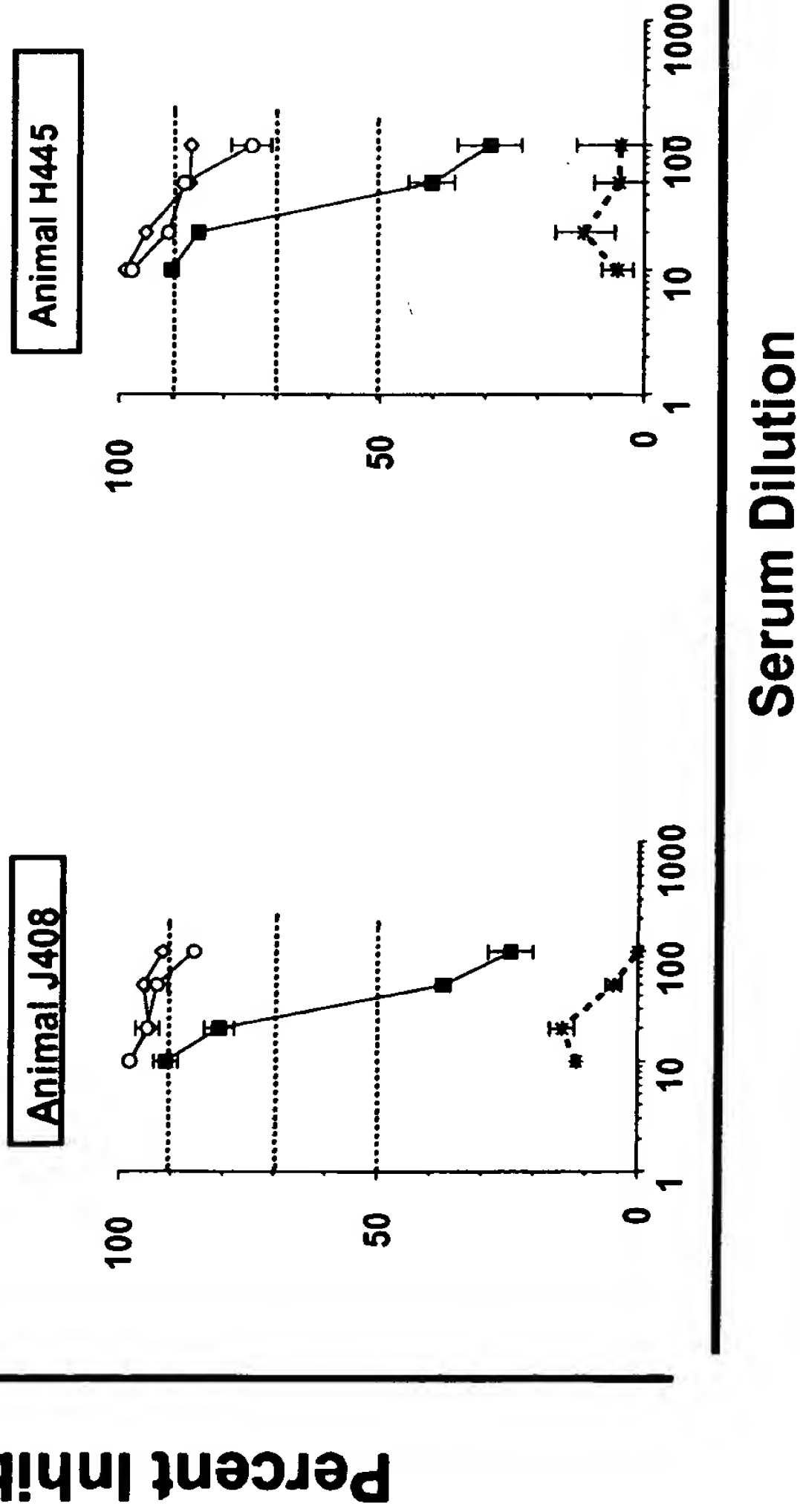


# 2570-1-001N FIGURE 11B

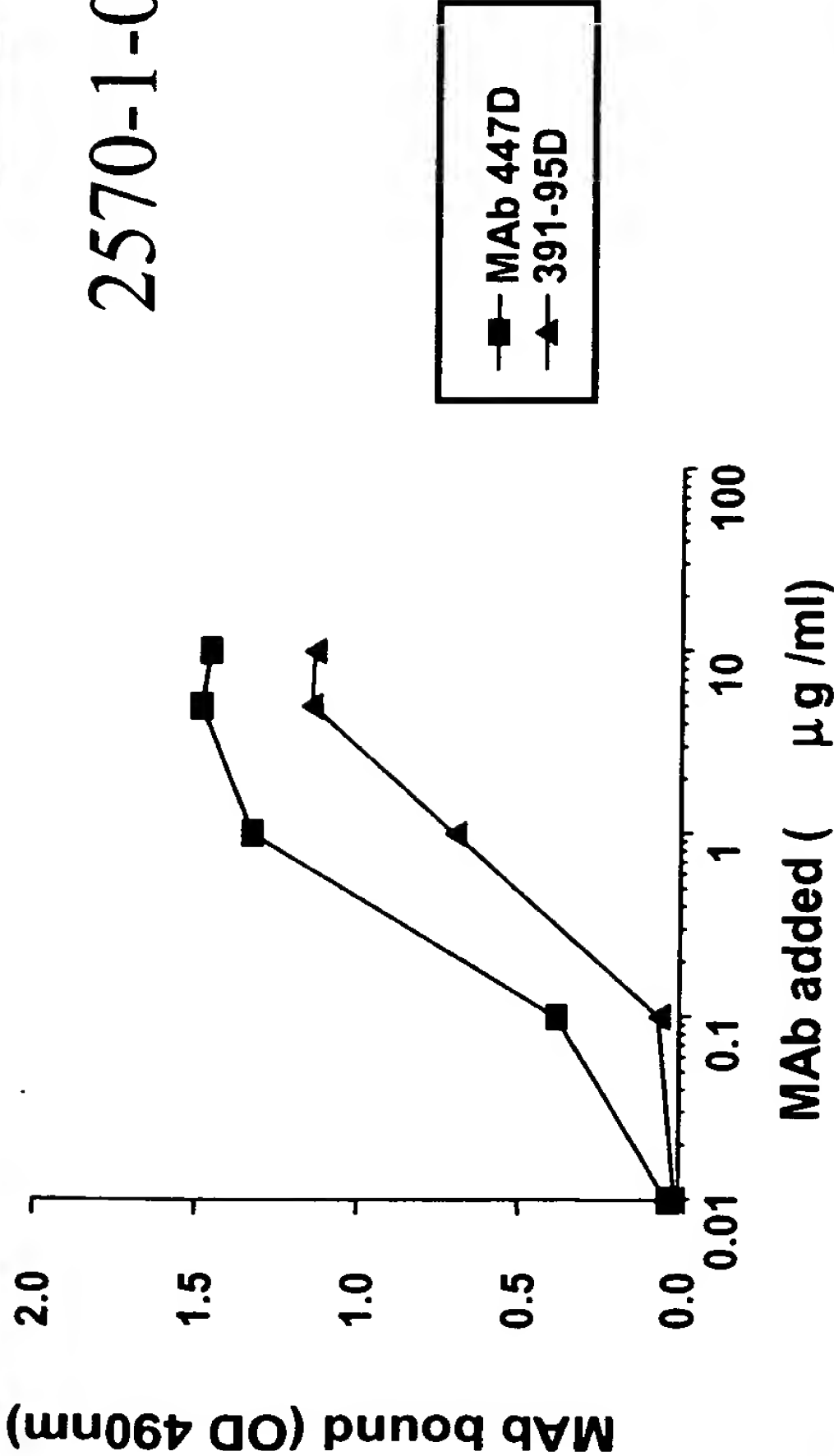
## Neutralization of the SF162 $\Delta$ V2 isolate



## Neutralization of the SF162 isolate

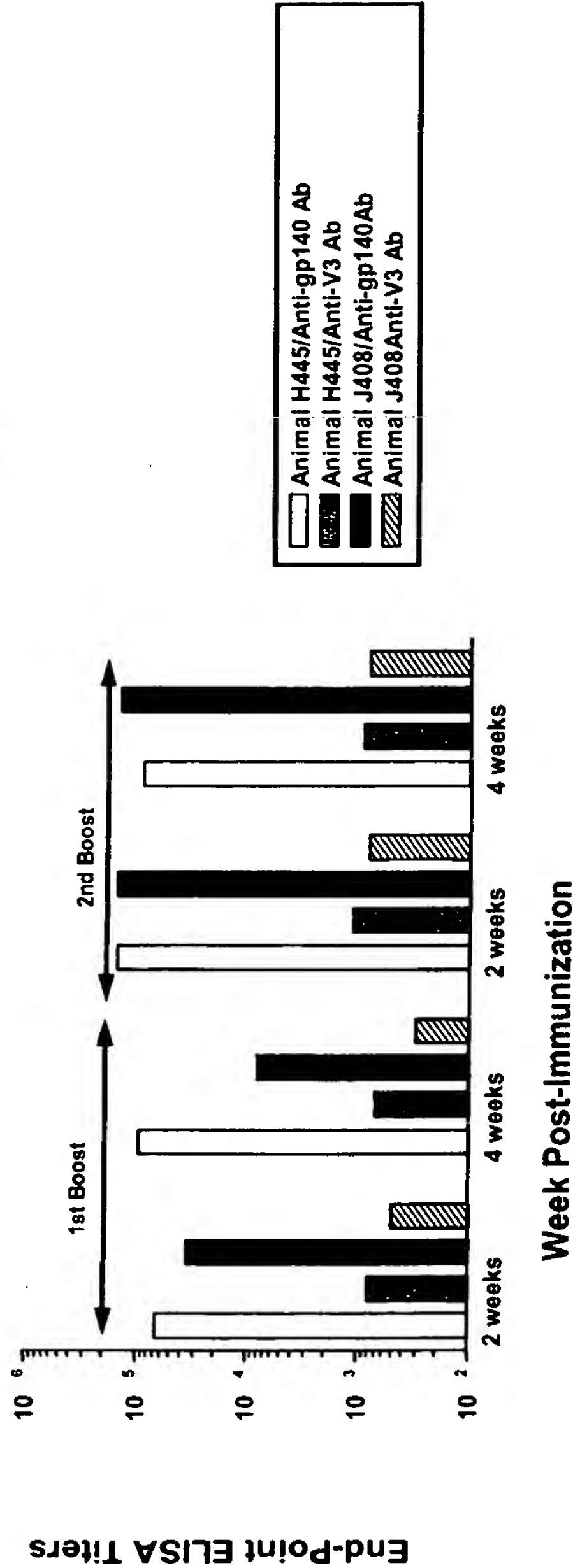


(A) Binding of Anti-V3 loop MAbs to the SF162  $\Delta$  V2-derived V3 loop peptide



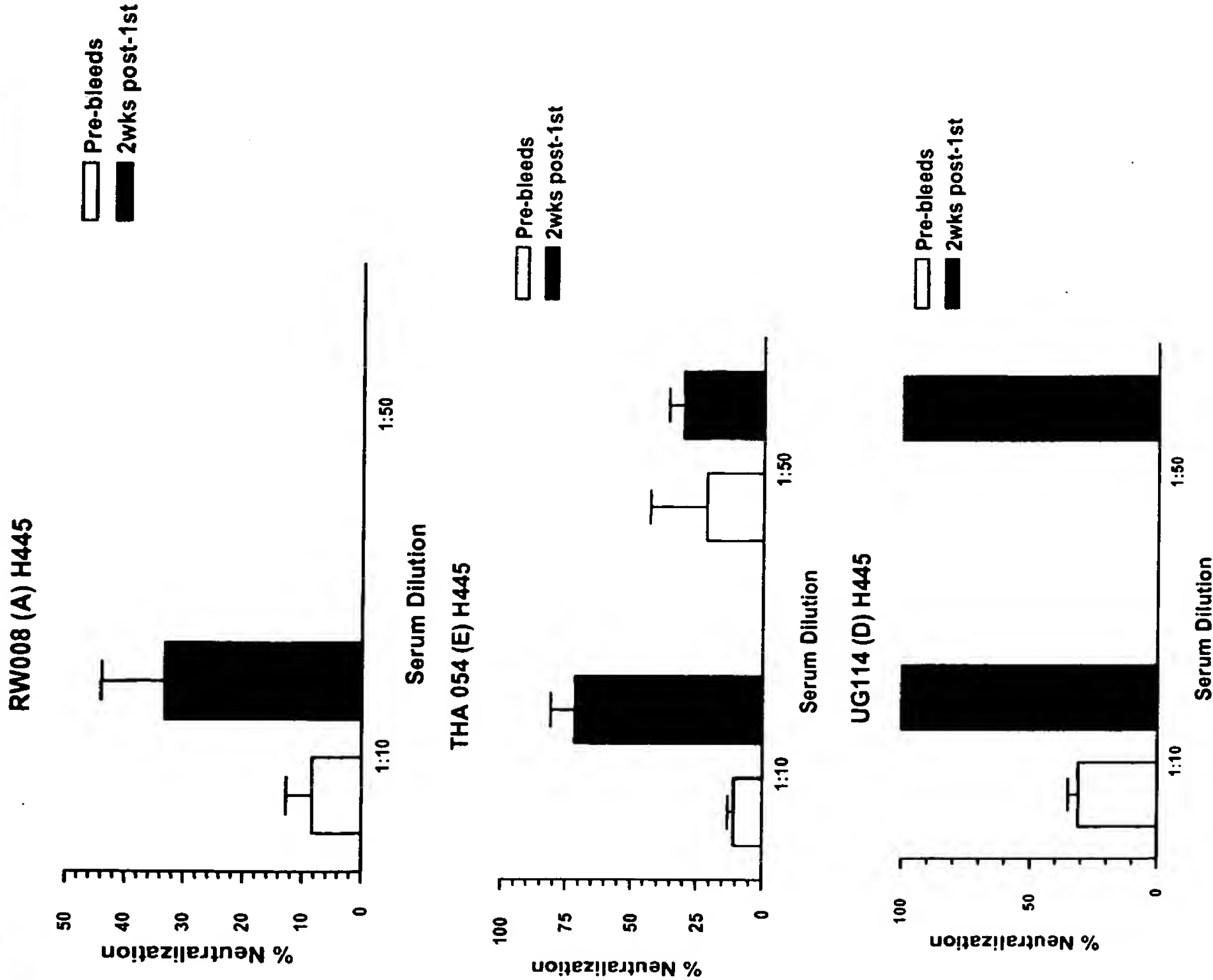
2570-1-001N FIGURE 12A-B

(B) Binding of macaque serum antibodies to the  $\Delta$  V2gp140 protein and the corresponding V3 loop peptide



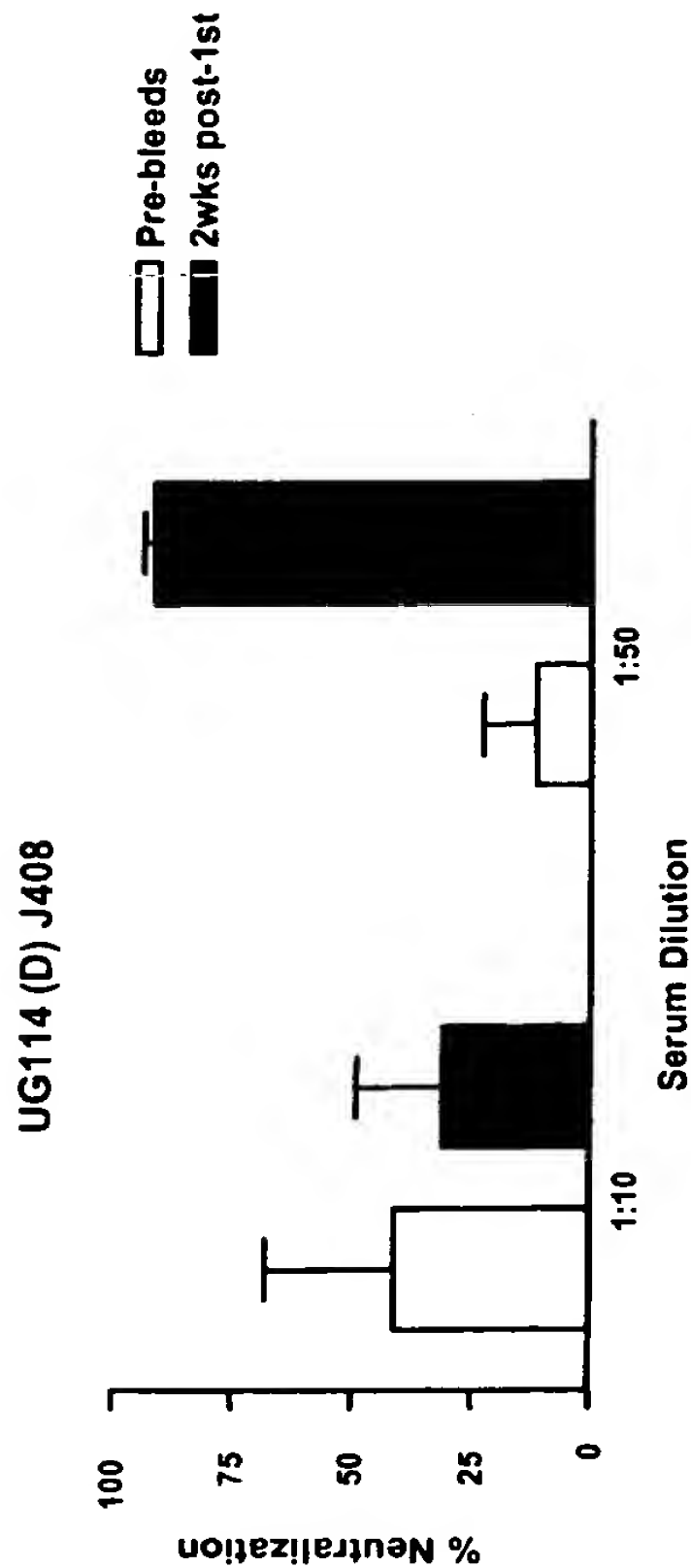
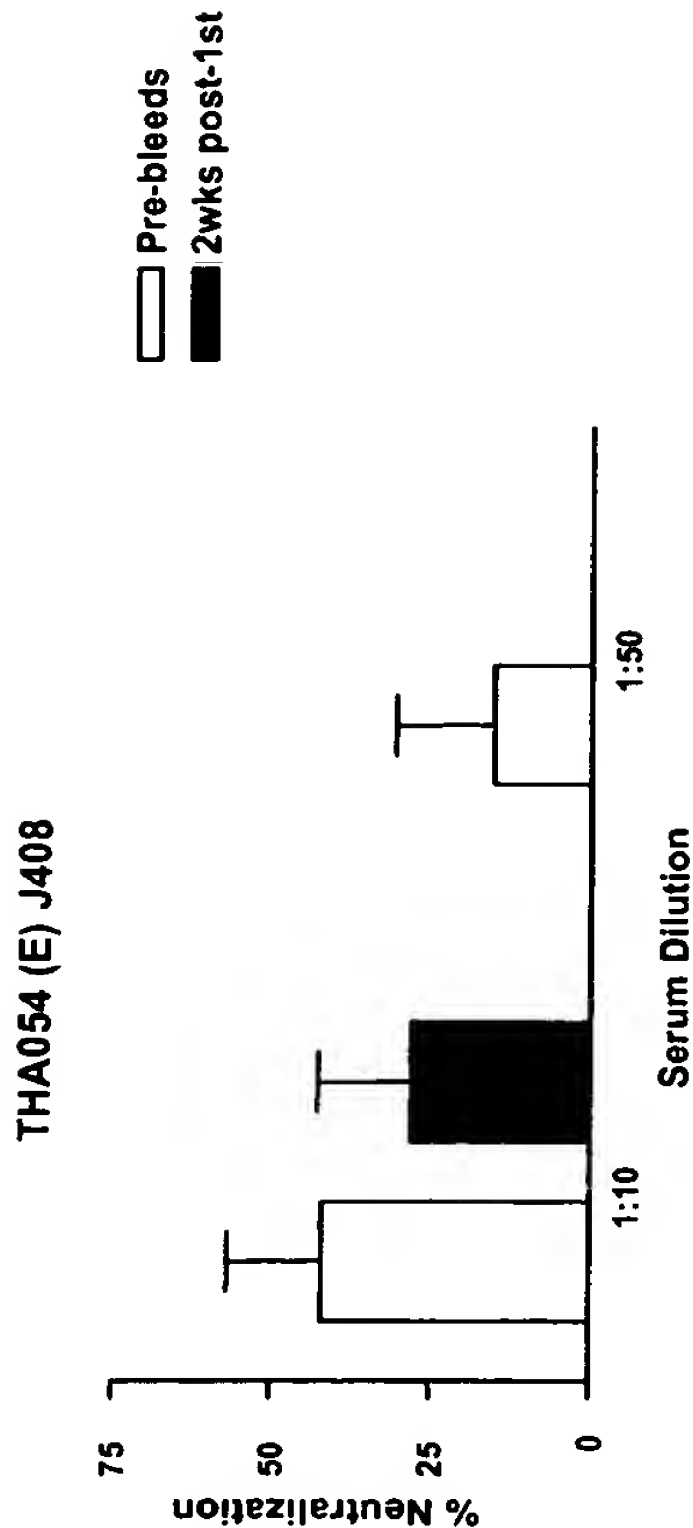
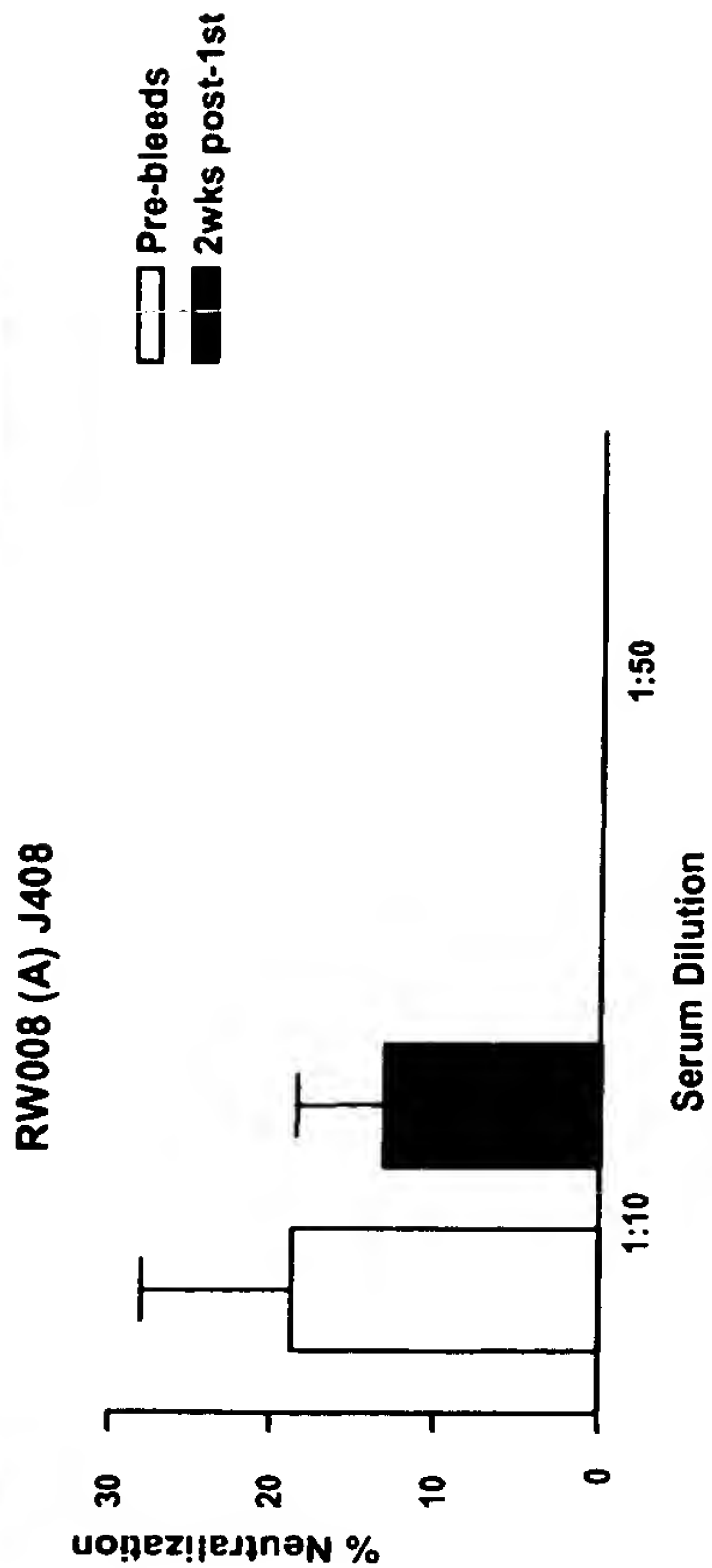
# FIGURE 13A

Neutralization of clade A, E and D HIV-1 viruses from sera collected from animal H445





Neutralization of clade A, E and D HIV-1 isolates  
from sera collected from animal J408



## 2570-1-001N FIGURE 14

atgagagtg aaggggatca ggaagaatta tcagcacttg tggagagggg gcaccttgct  
ccttgggatg ttgatgatct gtagtgctgt agaaaaattg tgggtcacag tctattatgg  
ggtacctgtg tggaaagaag caaccaccac tctattttgt gcatcagatg ctaaagccta  
tgacacagag gtacataatg tctgggccac acatgcctgt gtaccacacag accctaacc  
acaagaaaata gtattggaaa atgtgacaga aaattttaac atgtggaaaa ataacatggt  
agaacagatg catgaggata taatcagttt atgggatcaa agtctaaagc catgtgtaaa  
gttaacccca ctctgtgtta ctctacattg cactaatttg aagaatgcta ctaataccaa  
gagtagtaat tggaaagaga tggacagagg agaaataaaa aattgctctt tcaaggtc

-GGA-GCT-GGA-

aa attgataaat tgtaacacct cagtcattac  
acagggcctgt ccaaagggtat cctttgaacc aattcccata cattatttg cccggctgg  
ttttgcgatt ctaaagtgtg atgataagaa gttcaatgga tcaggaccat gtacaaatgt  
cagcacagta caatgtacac atggaattag gccagtagtg tcaactcaat tgctgttaaa  
tggcagtcta gcagaagaag gggtagtaat tagatctgaa aatttcacag acaatgctaa  
aactataata gtacagctga aggaatctgt agaaattaat tgtacaagac ctaacaataa  
tacaagaaaa agtataacta taggaccggg gagagcattt tatgcaacag gagacataat  
aggagatata agacaagcac attgtaacat tagtggagaa aaatggaata acactttaaa  
acagatagtt acaaaattac aagcacaaat tgggaataaa acaatagtct ttaagcaatc  
ctcaggaggg gaccagaaa ttgtaatgca cagttttaat tgtggagggg aattttcta  
ctgtaattca acacagcttt ttaatagtac ttggaataat actatagggc caataaacac  
taatggaaact atcacactcc catgcagaat aaaacaaatt ataacagggt ggcaggaagt  
aggaaaagca atgtatgccc ctcccatcag aggacaaatt agatgctcat caaatattac  
aggactgcta ttaacaagag atggtggtaa agagatcagt aacaccaccg agatcttcag  
acctggagggt ggagatatga gggacaattg gagaagtga ttatataaat ataaagtagt  
aaaaattgag ccattaggag tagcaccac caaggcaaag agaagagtgg tgcagagaga  
aaaaagagca gtgacgctag gagctatggt ccttgggttc ttgggagcag caggaagcac  
tatgggcgca cggtcactga cgctgacggt acaggccaga caattattgt ctggtatagt  
gcaacagcag aacaatttgc tgagagctat tgaggcgcaa cagcatctgt tgcaactcac  
agtctggggc atcaagcagc tccaggcaag agtcctggct gtggaagat acctaaagga  
tcaacagctc ctagggattt ggggttgctc tggaaaactc atttgacca ctgctgtgcc  
ttggaatgct agttggagta ataaatctct ggatcagatt tggaaataca tgacctggat  
ggagtggggg agagaaattg acaattacac aaacttaata tacaccttaa ttgaagaatc  
gcagaaccaa caagaaaaga atgaacaaga attattagaa ttggataagt gggcaagt  
gtggaattgg ttgacatat caaatggct gtggtatata aaa

# 2570-1-001N FIGURE 15

agtgctgt agaaaaattg tgggtcacag tctattatgg  
 ggtacctgtg tggaagaag caaccaccac tctatttgt gcatcagatg ctaagcccta  
 tgacacagag gtacataatg tctggggcac acatgcctgt gtaccacag accctaacc  
 acaagaaata gtattggaaa atgtgacaga aaattttaac atgtggaaaa ataacatggt  
 agaacagatg catgaggata taatcagttt atgggatcaa agtctaaagc catgtgtaaa  
 gttaaccca ctctgtgtta ctctacattg cactaatttg aagaatgcta ctaataccaa  
 gagtagtaat tggaaagaga tggacagagg agaaataaaa aattgctctt tcaaggtc

-GGA-GCT-GGA-

aa attgataaat tgtaacacct cagtcattac  
 acaggcctgt ccaaagggtat cctttgaacc aattcccata cattattgtg cccggctgg  
 ttttgcgatt ctaaagtgt atgataagaa gttcaatgga tcaggaccat gtacaaatgt  
 cagcacagta caatgtacac atggaattag gccagtagtg tcaactcaat tgctgtttaa  
 tggcagtcta gcagaagaag gggtagtaat tagatctgaa aatttcacag acaatgctaa  
 aactataata gtacagctga aggaatctgt agaaattaat tgtacaagac ctaacaataa  
 tacaagaaaa agtataacta taggaccggg gagagcattt tatgcaacag gagacataat  
 aggagatata agacaagcac attgtaacat tagtggagaa aaatgggaata acacttttaa  
 acagatagtt acaaaattac aagcacaaat tgggaataaa acaatagtct ttaagcaatc  
 ctgaggagg gaccagaaa ttgtaatgca cagttttaat tgtggagggg aatttttcta  
 ctgtaattca acacagcttt ttaatagtagt ttggaataat actatagggc caaataaacac  
 taatggaaat atcacactcc catgcagaat aaaacaaat ataaacagggt ggcagggaagt  
 aggaagagca atgtatgccc ctccatcag aggacaaat agatgctcat caaatattac  
 aggactgcta ttaacaagag atggtggtaa agagatcagt aacaccaccg agatcttcag  
 acctggagggt ggagatatga gggacaattg gagaagtga ttatataaat ataaagtagt  
 aaaaattgag ccattaggag tagcaccac caaggcaag agaagagtgg tgcagagaga  
 aaaaagagca gtgacgctag gagctatgtt ccttgggttc ttgggagcag caggagcac  
 tatgggcgca cggtcactga cgctgacggt acaggccaga caattattgt ctggtatagt  
 gcaacagcag aacaatttgc tgagagctat tgaggcgcaa cagcatctgt tgcaactcac  
 agtctggggc atcaagcagc tccaggcaag agtctgggt gtggaagat acctaaagga  
 tcaacagctc ctagggattt ggggttgctc tggaaaactc atttgcacca ctgctgtgcc  
 ttggaatgct agttggagta ataaatctct ggatcagatt tggataaaca tgacctggat  
 ggagtgggag agagaaattg acaattacac aaacttaata tacacctaa ttgaagaatc  
 gcagaaccaa caagaaaaga atgaacaaga attattagaa ttggataagt gggcaagttt  
 gtggaattgg ttgacatat caaatggct gtggtatata aaa

# 2570-1-001N FIGURE 16

## Amino acid sequence of SF162ΔV2 gp140

MRVKGIRK<sup>NY</sup>QHLWRGGTLLGLMLICS<sup>AVE</sup>KLWVT<sup>V</sup>YYG  
 VPVWKE<sup>AT</sup>TLFCASDAKAYDTEVHN<sup>V</sup>WATHACVPTDPNPQ  
 EIVLE<sup>N</sup>VTE<sup>N</sup>FN<sup>M</sup>WKNN<sup>M</sup>VEQMHEDI<sup>IS</sup>LWDQSLKPCVKLT  
 PLCVTLHCTNLK<sup>NA</sup>TNTKSSNW<sup>KEM</sup>DRGEIK<sup>NC</sup>SFKV-GAG-  
 KLINCNTSVITQACPKVSFEPI<sup>HY</sup>CAPAGFAILK<sup>CND</sup>KKFN  
 GSGPCT<sup>N</sup>VSTVQCTHGIRPVVSTQ<sup>LL</sup>NGSLAE<sup>EG</sup>VVIRSE<sup>N</sup>F  
 TDNAKTIIVQLKESVEIN<sup>CT</sup>RPNN<sup>TR</sup>KSITIGPGR<sup>AF</sup>YATGDI  
 IGDIRQAHCNISGEK<sup>WN</sup>NTLKQIVTKLQAQFG<sup>NK</sup>TIVFKQSS  
 GGDPEIVMHSFNCGGEFFYC<sup>NS</sup>TQ<sup>LF</sup>NSTW<sup>NT</sup>IGP<sup>N</sup>NTNG  
 TITLPCRIKQI<sup>NR</sup>WQEVGKAMYAPPIRGQIRC<sup>SS</sup>NITGLLLTR  
 DGGKEIS<sup>NT</sup>TEIFRPGGGDMRD<sup>N</sup>WRSELYKYKV<sup>V</sup>KIEPLGV  
 APTKAKRRVVQREKRAVTLGAMFLGFLGAGSTMGARSL  
 TLT<sup>V</sup>QARQLLSGIVQQQNNLLRAIEAQQHLLQLTVWGIKLQ  
 ARVLAVERYLKDQQLGIWGC<sup>SG</sup>KLIC<sup>TT</sup>AVPW<sup>NA</sup>SW<sup>SN</sup>K  
 SLDQIWNN<sup>MT</sup>WMEWEREID<sup>NY</sup>TNLIYTLIEESQNQQEKNE  
 QELLELDKWASLWNWFDISKWLWYIK

## 2570-1-001N FIGURE 17

Amino acid sequence of SF162ΔV2 gp140 less 27 amino acid N-terminal sequence

SAVEKLWVTVYYG  
VPVWKEATTTLFCASDAKAYDTEVHNVWATHACVTPDPNPQ  
EIVLENVTENFNMWKNMVEQMHEDIISLWDQSLKPCVKLT  
PLCVTLHCTNLKNATNTKSSNWKEMDRGEIKNCSEFKV-GAG-  
KLINCNTSVITQACPKVSFEPIPIHYCAPAGFAILKCNDKKFN  
GSGPCTNVSTVQCTHGIRPVVSTQLLLNGSLAEEGVIRSENF  
TDNAKTIIVQLKESVEINCTRPNNNTRKSITIGPGRAFYATGDI  
IGDIRQAHCNISGEKWNN<sup>1</sup>TLKQIVTKLQAQFGNKTIVFKQSS  
GGDPEIVMHSFNCGGEFFYC<sup>2</sup>NSTQLFNSTW<sup>3</sup>NN<sup>4</sup>TIGP<sup>5</sup>NN<sup>6</sup>TN<sup>7</sup>NG  
TITLPCRIKQIINRWQEVGKAMYAPPIRGQIRCSSNITGLLLTR  
DGGKEISNTTEIFRPGGGDMRDNWRSELYKYKVVKIEPLGV  
APTKAKRRVVQREKRAVTLGAMFLGFLGAAGSTMGARSL  
TLTVQARQLLSGIVQQQNNLLRAIEAQQHLLQLTVWGIKLQ  
ARVLAVERYLKDQQLLGIWGCSGKLICTTAVPWNASWSNK  
SLDQIWNNMTWMEWEREID<sup>8</sup>NYTNLIYTLIEESQNQQEKNE  
QELLELDKWASLWNWFDISKWLWYIK